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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/523,541	06/17/2005	Larry B. Brandenburger	160-P-1617USWO	7511
23322	7590	05/09/2007		
IPLM GROUP, P.A. POST OFFICE BOX 18455 MINNEAPOLIS, MN 55418			EXAMINER MOORE, MARGARET G	
			ART UNIT 1712	PAPER NUMBER
			MAIL DATE 05/09/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/523,541	Applicant(s) BRANDENBURGER ET AL.	
	Examiner Margaret G. Moore	Art Unit 1712	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2, 4, 6 to 26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 24 and 25 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4, 6 to 8, 10, 13 to 23, 26 is/are rejected.
- 7) ☒ Claim(s) 9, 11 and 12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. Applicants' amendment has overcome the prior art rejections made in the previous office action. Upon an updated review of the prior art, however, the Examiner has discovered new references that are pertinent to the instant application; they either teach and/or suggest at least some of the instant claims. See the new grounds of rejection below. Since these rejections were not necessitated by applicants' amendment this action cannot be made final. The Examiner apologizes for this unintentional delay in prosecution.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 4, 6 to 8, 10, 13 to 23 and 26 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Tobias et al.

Tobias et al. teach polyester coil coatings. Please see column 1, lines 20 to 25, which teaches the composition. Note that of the total amount of glycol, there will be at least 20 wt % asymmetric (both the butanediol and propane diol taught on column 1, lines 38 to 42 are both asymmetric).

The basis for this rejection relies on the breadth given to the term "about". That is, in the instant claims the total amount of isophthalic acid is between *about* 50 and 75 wt%. The upper disclosed amount of isophthalic acid in this composition is 48 wt%. Given the fact that the term "about" indicates that an exact limit is not intended and that

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this limit is, in fact, given a degree of latitude, one having ordinary skill in the art would consider "about 50" to be inclusive of 48. On the other hand a prima facie case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties. *Titanium Metals Corp. of America v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985). Thus one can conclude that the instant claims are anticipated by the prior art. On the other hand, if not anticipated, the difference in ranges is close enough that the skilled artisan would have expected the compositions to have the same properties and thus be obvious over one another.

More specifically, please see the working examples. In Example 1, isophthalic acid is present in an amount of 46.6 wt%. On one hand, one could consider the limit of *about* 50 wt% to be inclusive of 46.6 wt% and this composition meets that claimed. On the other hand, the difference between 46.6 and 50 would appear to be slight enough such that the skilled artisan would have found this difference to have been obvious.

It is significant to note the results in Example 2. This shows that the composition in Example 1 has a 1T bend fabrication test. This meets the requirement of the composition in claim 1. It also has a pencil hardness of H-2H. This meets the requirement of claim 19. Thus the compositions of the prior art do meet the physical requirements of the claimed composition, further supporting the Examiner's position of anticipation and/or obviousness.

The Examiner admits that Tobias et al. do not teach the glass transition temperature of the polyester resin; however, products of identical chemical composition can not have mutually exclusive properties. A chemical composition and properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. On the other hand, as noted before, if slightly different, the skilled artisan would have found the difference to have been obvious since any difference would not have been expected to result in different properties. To this effect, again note that the flexibility and hardness properties of both compositions are the same.

For claim 2, please see the bottom of column 2 which teaches pigments.

For claim 4, please note that the total amount of isophthalic acid in Example 1 is 81 wt%. Again, with the term "about" modifying 85 wt%, the value of 81 wt% would either anticipate or render obvious this claim. Also note that the total amount of isophthalic acid as determined from column 1, lines 20 to 25, clearly embraces values above 85 wt%.

Example 1 meets the requirements of claims 6 to 8 and 10, as does the basic range of diols for the composition found on column 1.

The requirements of claims 13 and 14 are found on column 2, lines 13 and on, as well as in Example 2.

For claims 15, 19 and 20, note that cited above regarding identical chemical compositions and the properties associated therewith.

For claim 16, please see the bottom of column 1, which teaches a range that completely embraces that claimed.

The requirement of claim 18 is met by the polyester in Example 1.

For claim 17, the Examiner acknowledges that Tobias et al. do not teach this blend of solvents. The claims, however, are drawn to a coated substrate, in which after coating the solvent will evaporate and no longer be present on the coated substrate. As such it would appear that the final coated substrates, per se, will be the same.

5. Claims 1, 2, 4, 8, 10, 13 to 15, 19, 20 to 23 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Piana.

Piana teaches heat curable polyester coating compositions for use on coils (column 5, line 42). This rejection relies on the rationale noted above, specifically that a prima facie case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties.

With this in mind, please see the composition in Table 1, A10. This includes isophthalic acid, adipic acid, 1,2-pentanediol and neopentyl diol. This composition has a total of 52 wt% isophthalic acid and a total of 87 wt% isophthalic acid based on all acids. Particularly note that it contains 19.6 wt% 1,2-butane diol. The difference between 19.6

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wt% and "greater than 20 wt" as claimed is quite small. Such a difference would be close enough that the skilled artisan would have expected the final polyesters to have the same properties. In this manner this working examples renders obvious the instant claims.

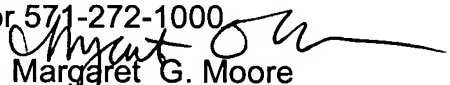
6. Claims 9, 11 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art fails to teach or suggest this combination of symmetric diols or the selection of the particular asymmetric diol found in these claims.

7. Claims 24 and 25 are allowed.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Margaret G. Moore whose telephone number is 571-272-1090. The examiner can normally be reached on Monday to Wednesday and Friday, 10am to 4pm.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Margaret G. Moore
Primary Examiner
Art Unit 1712

mgm
5/6/07